

OFF-LABEL USE OF GABAPENTIN AND PREGABALIN IN A TERTIARY HOSPITAL

González-Bueno J¹, Calvo-Cidoncha E², Desongles-Corrales T¹, Santos-Rubio MD¹, Chamorro-de-Vega E¹, Bautista-Paloma FJ¹.

¹Pharmacy Department. Virgen del Rocío Hospital; Sevilla ²Pharmacy Department. Virgen de Valme Hospital; Sevilla. Spain

Background

Gabapentin and pregabalin are two GABA analogues, example of an evergreening strategy. Both have been associated with a markedly off-label use.

Objective

To describe the extent and nature of the off-label use of gabapentin and pregabalin.

Material and Methods

❖ **Study design:** Prospective observational study

❖ **Inclusion criteria:** Patients on therapy with gabapentin or pregabalin during any time of the June-August 2014 period in a tertiary hospital.

❖ **Variables collected** → To describe the rate and nature of the overall and by drug off-label use

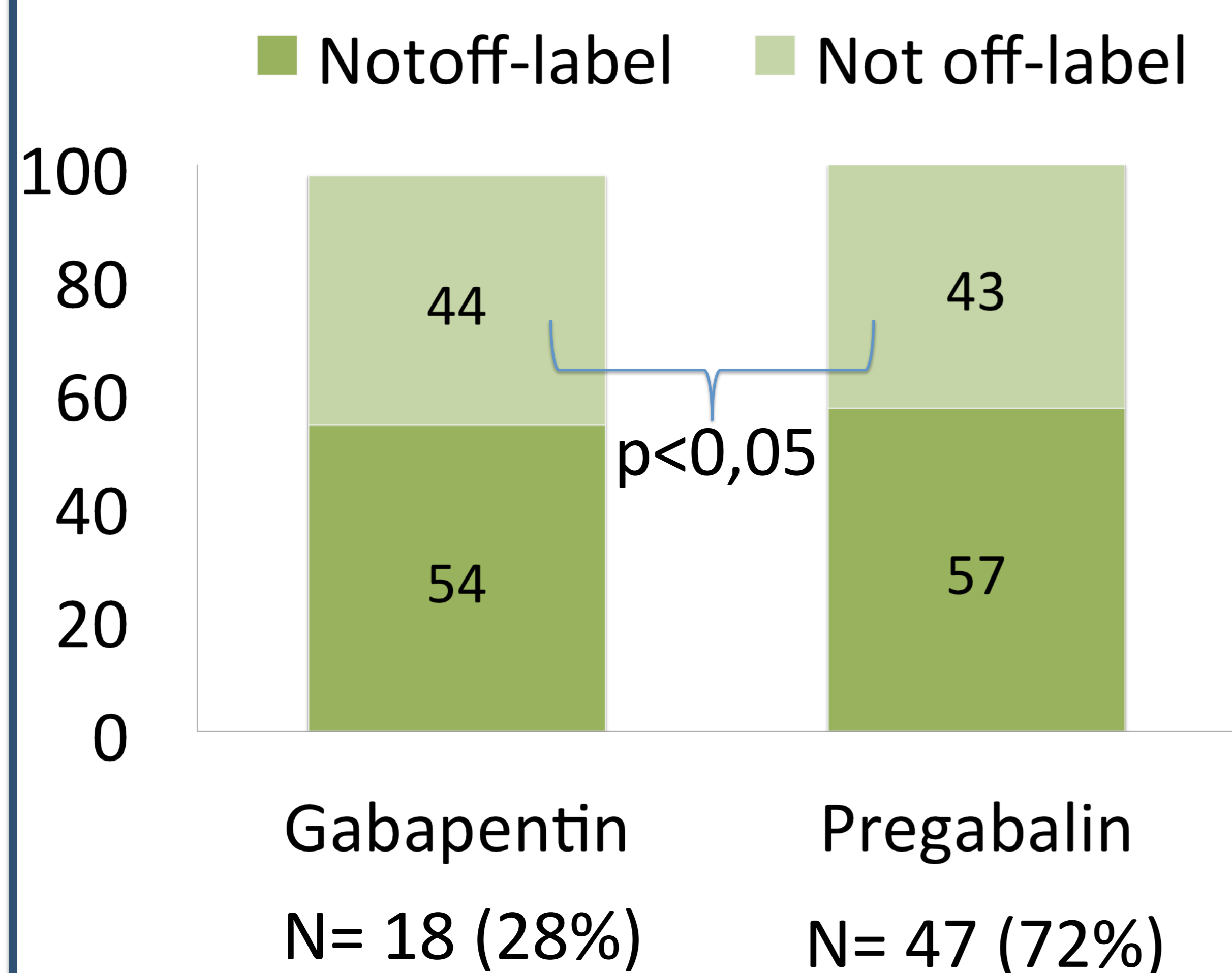
- Demographics
- Drug (pregabalin vs gabapentin)
- Therapeutic indication
- Dosage
- Cost per patient-month (according to retail prices)

❖ **Data sources:** Medical and pharmacy refill records.

❖ **Statistical analysis:** SPSS-20.

Results N= 65 (54% male, mean age 60 ± 14 years)

Off-label use



Indications off-label

Gabapentin

- Central neuropathic pain (N = 6)
- Subacute or chronic low back pain (N = 3)
- Generalized anxiety disorder (N = 3)

Pregabalin

- Subacute or chronic low back pain (N = 6)
- Fibromyalgia (N = 5)
- Essential tremor (N = 1)

Cost

The average cost per patient-month was **25 ± 11 €** for gabapentin and **156 ± 65 €** for pregabalin.

Conclusion

Gabapentin and pregabalin are often prescribed as an off-label use. Despite having failed to demonstrate clinically relevant differences over gabapentin, pregabalin holds a high prescription rate with consequent extra costs for the hospital, representing an area of improvement in promoting rational drug use.